I

BRIGG URBAN DISTRICT COUNCIL

ANNUAL REPORT

of the

MEDICAL OFFICER OF HEALTH

- 1966 -

BRIGG URBAN DISTRICT COUNCIL

Members of the Public Health Committee

Chairman - Councillor B. M. Robins

Councillors	F. G. Atton	Councillors	P. G. Morgan
	R. H. Barnard		T. Morgan
	D. Field		I. P. Strudwick
	G. L. Hewson		H. Welbourne

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MEDICAL OFFICER OF HEALTH

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PUBLIC HEALTH INSPECTOR

G. F. Hawkins, Cert. F.H.I.B., C.R.S.H. (meat), M.A.P.H.I.

Office: Town Hall, Brigg Tel.: Brigg 2257

Clerk: Miss D. M. Clarke

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50 Holydyke,

Barton-on-Humber,

July 1967

Mr. Chairman, Gentlemen,

The vital statistics for Brigg for 1966 are, I regret to say, exceptionally bad. All the "rates" which are conventionally used as indices of the health of a population are poor. Total deaths rose from 75 in 1965 to 109 in 1966, and deaths in the age group 25 - 45 increased from 1 in 1965 to 9 in 1966. Deaths in this particular age range have tragic consequences. The death of a young man commonly reduces a widow and children to living at subsistence level on Social Security payments and causes real hardship, while the death of a young mother may result in grave emotional trauma to children, particularly if they are below the age of 5, and can lead to permanent or long lasting stunting of their emotional and intellectual development. This increase in deaths of young adults, who ranged in fact from 26 years to 42 years old must cause us real concern. On looking into the causes of these deaths, however, no single factor can be incriminated as the cause. One young man died as a result of an industrial accident, a young woman died as a result of a motor accident, another died following an operation to patch up a congenitally malformed heart. A man in his thirties died of asthma, another of broncho-pneumonia, and another bled to death from a peptic ulcer. Other deaths of young adults were due to cancer of the throat and coronary heart disease. The Registrar General shows also one death from suicide. This was omitted from the local statistics as the death actually occurred in 1965, although it was not registered until 1966. In addition to these deaths of people below the age of 45, a death from malignant disease of a man of 47 is included in the locally compiled table as this covers deaths up to the age of 50. With such a wide variety of causes of death involved it is hard to see how the physical environment at Brigg could be to blame, or what we can do to remedy the position. The industrial accident did not occur within the town, nor did the road accident. Two of the deaths from disease were

sudden deaths of people who were not even attending a doctor, the cause of death having to be ascertained by post-mortem examination. Perhaps had these patients soughtmedical advice instead of just putting up with their symptoms their lives might have been lengthened. Four more of the deaths occurred in hospitals in Manchester, Sheffield, Lincoln and London. Local facilities for medical treatment cannot therefore be blamed. Apart from Health Education aimed at persuading people to take exercise, eat suitable diets, avoid known carcinogenic hazards and seek medical care early there is little we can do. Action under the Clean Air Act to make Brigg a Smoke Control area would reduce the amount of Benzpyrene in the environment and eventually might reduce the incidence of some of the cancers. Multiple screening clinics for the early detection of disease might also be of value, provided the public made full use of them.

The towns perinatal mortality, stillbirth and infant mortality statistics for 1966 were also extremely unfavourable, but again more detailed examination does not indicate any environmental cause. Two of the infant deaths were due to serious congenital malformation and two to extreme prematurity. One was of the type we call "cot death" where a baby is found dead of asphyxia and inhaled vomit. We do not yet know enough about the causes of malformations to be able to prevent them, although avoidance of contact with infections such as german measles and of drugs of any sort during the first 12 weeks of pregnancy can prevent some. The reasons why some women go into labour prematurely are not yet understood. It occurs far more frequently in those who book late and do not obtain ante-natal care than in those who see their doctor or midwife regularly from an early stage in pregnancy. "Cot deaths" have, however been thoroughly investigated. Babies who are breast fed for the first two or three weeks of life, even if they are subsequently put on the bottle rarely if ever die in this way. It is known that many of the babies who die like this have antibodies against cows milk protein in their blood, and it may well be that sensitisation to cows milk due to early bottle feeding is a major cause. Infection and the use of soft pillows are also factors associated with these sudden deaths. If all

babies were breast fed exclusively for the first two weeks of life and the use of soft pillows for babies were avoided many babies lives would be saved.

In view of the evidence that breast fedding even for so short a time protects from risk of sudden death it is unfortunate that so many mothers are today unwilling to feed their babies naturally. Many mothers never attempt breast feeding at all, even while they are in hospital. One cannot help wondering whether the picture might not be different had the report published by the Ministry of Health in 1965 and entitled "Enquiry into sudden death in Infancy" been given the publicity it deserves, and copies issued to every midwife and doctor. Many women claim theyare not able to breast feed for a variety of reasons, but most would succeed if they persisted. European women interned by the Japanese in Hong Kong during the last war despite living under bad conditions on a poor diet achieved an astonishingly high success rate. Plainly, the well-fed mothers of today could do even better, if they wished. It is up to us to explain th them the advantages of breast feeding more convincingly. Many midwives today do not like to do so for fear of making those few women who are unable to breast feed feel guilty about it. In this they are mistaken. A woman who has tried but failed knows that she has done her best for her baby, but a woman who has never tried and whose baby later dies in its cot may well feel guilt as well as grief. Fortunately the better educated and more intelligent mothers do tend to breast feed more frequently now, and experience has shown that fashions set by such people are often followed by the majority a decade or so later.

Although detailed examination does not indicate that the towns adverse vital statistics are due to environmental factors we cannot claim that the environment is satisfactory. Many of the houses in the town are still substandard. For a town of its size Brigg has made too little use of both Standard and Discretionary Improvement Grants. Many of the Council Houses were built at a time when standards were lower. By todays standards they offer poor accommodation, and their lay-out does not lend itself to satisfactory modernisation. The more modern council houses

however, are of good design, and it is encouraging to know that within the next few years the old prefabs. will be replaced by modern houses.

Although this had not been done by the end of 1966 it is satisfying to see that the dangerous derelict properties in Paradise Place have at long last been demolished, and a real effort is being made in connection both with development of the central area and in seeking to replace the present slum-like council offices. While I appreciate that many of you still do not accept that drab surroundings can adversely affect health I remain convinced myself that the replacement of an ugly, untidy and depressing environment by one which is aesthetically pleasing benefits morale and contributes to the promotion of mental health. That this is so is surely illustrated by the change which occurs in some families following rehousing from a slum. The improvement can be quite astonishing. There are always the few whose abilities, attitudes and habits are such that they tend to make a slum whereever they live, and like all towns Brigg has its share of these. The encouraging results we have seen from training at a residential rehabilitation establishment show what can be achieved. Such training is extremely expansive, but well worth while. It is to be hoped that welfare authorities will make provision to increase facilities for training in response to the governments suggestion in the circular on "Homeless Families".

Among the environmental defects with whose correction we must concern ourselves is noise. Comment on this most difficult topic is necessary because of the effects of the rapidly increasing heavy vehicle traffic passing through the town. Noise, like dreary or ugly surroundings tends to affect mental rather than physical health, and its consequences are very hard to measure. At high intensities - 90 decibals and over - noise may damage the ears and cause high frequency deafness. On the other hand, complete absence of sound is also harmful. Man cannot for long tolerate complete sensory deprivation. Most people feel insecure without a reassuring background of familiar sound. The effect of a sound of low or moderate intensity depends upon its context, and on how the individual interprets it. The quiet ticking of the bedroom clock is familiar and

reassuring. The same sound coming from a bomb casing however provokes extreme fear. The same individuals will react differently to the same music if it is played by his neighbour when he is trying to go to sleep instead of at a time when he wishes to listen.

The noise of heavy lorries coming through Wrawby Street and Bigby Street is not so loud as to cause physical harm to the occupants of adjacent property. It is the knowledge of the size and weight of the vehicles, of the narrowness of the street and the explosive, corrosive, or inflammable nature of the contents of most of the tankers and fear of the damage which they could cause which imbues the sound of this traffic with a capacity to cause fear. Incidents such as the accident involving a tanker full of liquid butane which crashed just outside the town, an incident which a flame or spark could so easily have turned into a disaster, help to foster such fear. As larger and heavier vehicles come into service the buildings on either side of this street are shaken with increasing severity, and the fact that at night the noise is intermittent rather than continuous further exacerbates its effect. Man can adapt himself to a continuous sensation, and learn to ignore it far more easily than he can to an intermittent stimulus. It is hardly surprising therefore that some people who dwelt alongside the main road have felt impelled to seek housing in quieter parts of the town. There can be no doubt that by interfering with sleep, by stimulating feelings of fear and insecurity and by causing annoyance the noise of heavy traffic passing through the town is prejudicial to mental health. When the new oil refineries at Killingholme are completed and come into operation the problem will become even worse, and will only be relieved when the proposed by-pass road is built. Despite repeated representations by the council the Minister of Transport has not yet seen her way to authorise construction of this urgently needed amenity. Industry without adequate communications can be a liability instead of an asset, and the resulting traffic congestion will create other health hazards in addition to that due to noise.

All the traffic from the new refineries and other Humber Bank industries will have to make use of the few existing bridges over the

Ancholme and Trent, or go south along even less adequate roads. One of the refineries is proposing to distribute its output predominently by rail. A simple calculation suggests that oil trains may become so frequent as to greatly impede the flow of road traffic from north to south. Although this has been known for some years no attempt has been made to replace the level crossings by bridges. This factor in combination with the concomitant increase in east and west road traffic which will be held up by congestion at Brigg and Keadby Bridge may lead to quite exceptional traffic jams.

The initial build up in traffic accident risks would of course wane as traffic flow is reduced to a crawl, but when this occurs the efficiency of the ambulance and fire services will be impaired. In narrow streets such as Wrawby Street and Bigby Street the concentration of carbon monoxide, carcinogenic hydrocarbons and lead from the exhausts of vehicles may reach harmful levels. During periods of low wind velocity this could become a real problem, for these streets are exceptionally narrow. Only urgent action now to build either the by-pass, to build a further bridge over the Ancholme with an approach road within the town, or both, can prevent a serious deterioration of the quality of life in Brigg.

Doubtless when the congestion has become grave enough urgent action will be taken, and the traffic delayed even more by the road contractors. By then it will be too late to prevent economic loss, harm to health or risk to life. The exercise now of foresight and immediate authorisation of the construction of the Brigg by-pass and the replacement of level crossings by bridges would confer benefits on both the national economy and to the health of the people in Brigg.

The town continued to enjoy an adequate and wholesome supply of potable water provided by the North Lindsey Water Board. Chlorination was fully effective throughout the year, and even when as a result of the making of pea silage in the vicinity of the bore large numbers of coliform organisms were present in the raw water all samples of the treated water proved of excellent quality. As the demand for water continues to rise

the Water Board has to seek and develop further sources. Soon the limit of possible yield of the Wolds area will be reached. Alternative sources are being sought, and on the Boards success in finding and developing these will depend the rate at which industrial, economic, and population growth in our area can occur.

Sewage disposal for the town continues to present problems. Although only recently completed the new works are already becoming overloaded, due predominantly to an unforseen increase in the trade effluent from the canning factory. The Council's engineers have been authorised to design an extension to the works to deal with this. In the meantime we have periodic episodes when the effluent from the works becomes highly unsatisfactory.

Since the closure of the refuse tip the nuisance from burning refuse has been removed from the town. The longer haul from Brigg to the tip in the Rural District which has been used in lieu has caused some delays from time to time, and gave rise to some complaints. The new larger vehicle has helped materially to ensure a quicker and better service.

With regard to food hygiene, although the standards in shops has been tending to improve over the years the same cannot be said of some of the catering establishments. Market stalls also present a difficult problem because of the physical difficulty of providing anything more than primitive washing facilities. Proposals to make a supply of hot water available to market traders at some central point were again discussed but this provision has not yet materialised.

The quality of the town's public conveniences continues to give cause for concern, and the committee discussed this problem on several occasions. Limitations of space render effective modernisation and improvement of some of the existing public lavatories impracticable, and damage to all public toilets by vandals proved troublesome. Plainly, if a reasonable service is to be provided for the public we should scrap the existing unsatisfactory premises and build instead an advanced type of unit with all pipes, flushing cisterns, electric lights, wiring, switches, etc., in a central locked service compartment. Access of light to the public section should be through glass bricks, and control of water to basins and toilet flushing by substantial

foot pedals protruding through the walls. The additional cost of installing unusual types of fittings such as built-in hot air hand dryers, at least one squatting type toilet, detergent dispensing valves piped to a central and concealed reservoir canister etc. would ultimately result in economy since the cost of maintainance and repairs of damage would be reduced. Coin operated locks on toilet doors are undesirable, and a coin operated toilet paper dispenser would seem a better means of collecting revenue and assuring that a supply of paper remained available. Experience at the new toilets at the cattle market has shown that our local convenience wreckers do not respect clean modern toilets of conventional design, and only by making the premises as nearly as possible vandal proof can one hope to keep unsupervised toilets in good condition. Such elaborate provision will naturally take longer to design, build and install than would a more conventional unit. Let us hope that something on these lines can be built by 1969!

It might appear from the criticisms and suggestions in the earlier part of this report that Brigg is not a desirable place in which to live, but this is far from the truth. It is indeed an attractive and busy little market town, small enough to be spared serious air pollution, and with the natural advantages of being situated on a navigable river which provides recreational opportunities for those who fish, boat or swim. Shopping facilities are excellent, car parking facilities are less inadequate than those of some comparable towns. Adequate general medical services are provided by three separate partnerships of general practitioners, so giving the public freedom of choice. Hospital outpatient clinic facilities are provided in the town, and a partnership of two dental practitioners has a surgery in the town. County Council provision includes infant welfare and school health service minor ailment clinics, a cervical cytology clinic, home nursing and midwifery service. A new dental clinic has been built, and should soon be staffed by a county council dentist who will treat school children. In the near future a county council family planning service may be provided. Facilities for the subnormal include an Adult Training Centre and two residential hostels. The town is unusually well provided with schools, there being private schools as well as the council's primary, secondary modern, and grammar schools. There can be few towns of its size so rich in educational opportunity. An annual report such as this is not however intended as a brochure for intending

immigrants, but a review of the area's problems and how they are being or should be tackled. In consequence more time must be devoted to the blots in the copybook than to the writing itself. Change is inevitable and Brigg cannot remain unaffected by the rapid development of the south bank of the Humber. Increase in population and size will result in new problems, and it is our task to forsee and prevent or remedy these.

As the number of chimneys increases the need for smoke control will grow. As the built-up area expands the need for developing open recreational space within the town will become more apparent. The standards of amenity, housing and service which the public expects continue to rise, and consequently the load of work on the council's staff increases, and the pace of our advance is governed by the availability of staff, and the provision of suitable premises in which they can work. Let us hope that the towns present problems in these two areas will be quickly and effectively remedied so that full advantage can be taken of our opportunities to make Brigg a better town to live in.

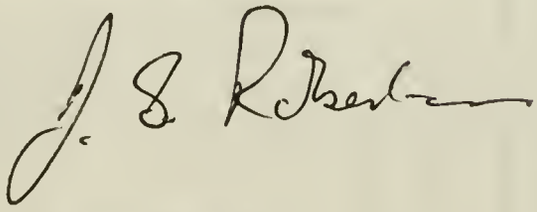
From time to time the council has been criticised for actions which are truly in the public interest, although unpopular with some sections of society. One such decision which gave rise to criticism was the discontinuation of "all night" beat dances at the Corn Exchange. While dances for adolescents are a commendable amenity, those which go on too late are socially undesirable. It is functions such as these which create the demand amongst the young for drugs which will enable them to remain awake and alert. Young people under the influence of one drug may then be tempted to experiment with another, and during 1966 it was reported that some drug peddling had been taking place in the town. Regrettably, some young people seem to dismiss what they are told of the ultimate effects of drug addiction as propaganda, or like adults addicted to cigarettes assume that the danger applies only to others or that they can always stop but postpone doing so a little longer.

In reducing the temptation to resort to amphetamine the council's decision to ban "all night" dances was a wise one to which I hope they will adhere. Neither decisions such as this nor their consequences can be seen in the tabulated data which follows. Their effect on the future health of the public is nevertheless extensive, and should not be underestimated.

As usual I am indebted to Mr. Hawkins for much of the information in the tables which follow, and commend them to your notice.

I remain,

Your obedient servant,



J. S. Robertson,

Medical Officer of Health.

VITAL STATISTICS

	1964	1965	1966
Mid-year population	5,000	5,050	5,110
Live births	78	91	92
Stillbirths	3	2	3
Infant deaths under 4 weeks	3	1	4
Total deaths	79	75	109

	Legitimate			Illegitimate			Total
	Male	Female	Total	Male	Female	Total	
Live births	42	45	87	3	2	5	92
Stillbirths	2	1	3	-	-	-	3
Infant deaths under 1 year	4	1	5	-	-	-	5
Infant deaths under 4 weeks	4	-	4	-	-	-	4
Infant deaths under 1 week	3	-	3	-	-	-	3

	1965	1966	England & Wales 1965	1966 (provision
Crude Birth Rate	18.0	18.0	18.1	17.7
Corrected Birth Rate *	19.1	19.1	(18.1)	
Stillbirth Rate	21.5	31.6	15.8	15.4
Infant Mortality Rate	22.0	54.4	19.0	19.0
Legitimate Infant Mortality Rate	23.5	57.5	18.5	
Illegitimate Infant Mortality Rate	----	----	24.8	
Neonatal Mortality Rate	11.0	43.5	12.9	12.9
Early Neonatal Mortality Rate	11.0	32.6	11.2	11.1
Perinatal Mortality Rate	32.3	63.1	26.9	26.3
Illegitimacy Rate	6.6	5.4	7.7	
Crude Death Rate	14.8	21.5	11.5	11.7
Corrected Death Rate *	11.5	15.5	(11.5)	

* These corrections take account of the different proportions of old and young people in the area, and make resulting rate comparable with that for England and Wales. Thus a resort to which old people retire would have a high crude rate, but a low comparability factor would correct the false impression that this was an unhealthy area. The comparability factor for births in this district is 1.06 and for deaths 0.72.

CAUSES OF DEATH IN THE DISTRICT DURING THE YEAR 1966

(Registrar General's Figures)

CAUSES OF DEATH	AGE IN YEARS						TOTAL	
	0-	1-	15-	25-	45-	75+	M	F
Tuberculosis Respiratory	-	-	-	-	-	-	-	-
Tuberculosis Other	-	-	-	-	-	-	-	-
Syphilitic Disease	-	-	-	-	-	-	-	-
Diphtheria	-	-	-	-	-	-	-	-
Whooping Cough	-	-	-	-	-	-	-	-
Meningococcal Infection	-	-	-	-	-	-	-	-
Poliomyelitis	-	-	-	-	-	-	-	-
Measles	-	-	-	-	-	-	-	-
Other Inf. & Parasitic Diseases	-	-	-	-	-	-	-	-
Cancer - Stomach	-	-	-	-	2	1	2	1
Cancer - Lung	-	-	-	-	3	-	3	-
Cancer - Breast	-	-	-	-	2	1	-	3
Cancer - Uterus	-	-	-	-	-	-	-	-
Cancer - Other	-	-	-	1	5	4	7	3
Leukaemia	-	-	-	-	-	-	-	-
Diabetes	-	-	-	-	-	-	-	-
Vascular Lesions (C.N.S.)	-	-	-	-	6	12	6	12
Coronary Disease, Angina	-	-	-	1	6	6	11	2
Hypertension	-	-	-	-	1	-	1	-
Other Heart Disease	-	-	-	-	3	14	6	11
Other Circulatory Disease	-	-	-	-	2	2	4	-
Influenza	-	-	-	-	1	2	2	1
Pneumonia	-	-	-	1	3	5	8	1
Bronchitis	-	-	-	-	2	1	3	-
Other Respiratory Diseases	-	-	-	-	-	-	-	-
Ulcer - Stomach & Duodenum	-	-	-	1	-	-	1	-
Gastritis, Enteritis, etc.	-	-	-	-	-	-	-	-
Nephritis and Nephrosis	-	-	-	-	-	-	-	-
Hyperplasia of Prostate	-	-	-	-	-	-	-	-
Pregnancy	-	-	-	-	-	-	-	-
Congenital Malformations	2	-	-	1	-	-	2	1
Other Diseases	2	-	1	1	3	5	9	3
Motor Accidents	-	1	-	1	-	-	1	1
All Other Accidents	1	-	-	1	-	1	2	1
Suicide	-	-	-	1	-	-	1	-
Homicide	-	-	-	-	-	-	-	-
Total All Causes:	5	1	1	9	39	54	69	40

CAUSES OF DEATH AT VARIOUS PERIODS OF LIFE

(Locally compiled statistics)

CAUSES OF DEATH	AGE IN YEARS			
	0 - 1	1 - 14	15 - 49	50+
Infectious Diseases				
Tuberculosis - respiratory	-	-	-	-
Tuberculosis - other	-	-	-	-
Syphilitic disease	-	-	-	-
Diphtheria	-	-	-	-
Whooping Cough	-	-	-	-
Meningococcal Infection	-	-	-	-
Acute Poliomyelitis	-	-	-	-
Measles	-	-	-	-
Other Infectious and Parasitic Diseases	-	-	-	-
The Cancers				
Stomach	-	-	-	2
Lung and Bronchus	-	-	-	3
Breast	-	-	-	4
Uterus	-	-	-	-
Other	-	-	2	7
Leukaemia - Aleukaemia	-	-	-	-
Diabetes	-	-	-	-
Cardiovascular Diseases				
Vascular Lesions, C.N.S.	-	-	-	20
Coronary Disease, angina	-	-	1	10
Hypertension with heart disease	-	-	-	-
Other heart diseases	-	-	1	20
Other Circulatory diseases	-	-	-	5
Respiratory Diseases				
Influenza	-	-	-	3
Pneumonia	-	-	1	8
Bronchitis	-	-	-	3
Other	-	-	1	-
Ulcer of the stomach and duodenum	-	-	1	-
Gastritis, Enteritis and Diarrhoea	-	-	-	-
Nephritis and Nephrosis	-	-	-	-
Hyperplasia of prostate	-	-	-	-
Pregnancy, childbirth and abortion	-	-	-	-
Congenital malformations	2	-	-	-
Other Diseases	2	-	1	5
Motor Vehicle accidents	-	1	1	-
All other accidents	1	-	1	1
Suicide	-	-	-	-
Homicide	-	-	-	-

NOTIFICATIONS OF INFECTIOUS AND OTHER DISEASES BY AGE GROUPS

DISEASE	0-	1-	2-	3-	4-	5-	10-	15-	25-	45-	65+	Total
Measles	3	6	6	4	5	42	-	1	-	-	-	67
Infective Jaundice	-	-	-	-	-	-	-	3	-	1	1	5
Respiratory Tuberculosis	-	-	-	-	-	-	-	1	-	1	-	2
Dysentry	1	-	-	-	-	-	-	-	-	-	-	1
TOTAL	4	6	6	4	5	42	-	5	-	2	1	75

During the year there were no cases of the following diseases notified:-

Meningococcal Infection; Food Poisoning; Poliomyelitis; Diphtheria; Smallpox; Encephalitis; Typhoid fever; Paratyphoid fever; Whooping Cough; Pneumonia; Erysipelas; Purperal Pyrexia; Opthalmic Neonatorum; Anthrax; Leptospirosis; Scarlet Fever.

PARTICULARS OF IMMUNISATION AND VACCINATION CARRIED OUT IN THE AREA DURING 1966

Type of Vaccination or immunisation	Under 1	1 - 4	5 - 14	15 or over	Total
Diphtheria and Whooping cough Immunisations	-	-	-	-	-
Diphtheria, Tetanus and Whooping cough Immunisations:					
Initial	38	34	1	-	73
Booster	-	22	10	-	32
Diphtheria and Tetanus immunisations:					
Initial	-	6	21	-	27
Booster	-	-	28	-	28
Tetanus Immunisations:					
Initial	-	-	17	10	27
Boosters	-	-	-	-	-
Smallpox:			5 - 15		
Vaccination	2	25	4	-	31
Re-vaccination	-	-	8	-	8

Particulars of Poliomyelitis vaccinations carried out in the Brigg U.D. during the year ended 31st December, 1966

SALK VACCINE

	66	65	64	63	62	61-55	54-50	Others
Two injections	-	-	-	-	-	-	-	-
Three injections	-	-	-	-	-	-	-	-
4th Injection	-	-	-	-	-	-	-	-

ORAL VACCINE

	66	65	64	63	62	61-55	54-50	Others
Initial course of 3 oral doses	26	49	5	9	1	21	8	-
Oral booster after 2 injections	-	-	-	-	-	-	-	-
Booster dose of oral vaccine	-	-	-	-	-	39	-	-
TOTAL	26	49	5	9	1	60	8	-

PUBLIC WATER SUPPLY

Water is supplied to the town by the North Lindsey Water Board. The water comes from deep bores in the chalk at Barrow-on-Humber.

As usual, pollution of the raw water was noted in the weeks following the beginning of the pea harvest. Following tracing of this pollution to the making of pea silage in quarries two miles from the bore one farmer made his stack on surface site instead of in a quarry, but his neighbour continued to use a quarry. It is believed that the delay in appearance of pollution, as compared with previous years, and the slight reduction in severity of pollution, were both due to the discontinuation of silage making in the one quarry and the longer time taken by material from the other quarry to reach the bore.

Presumptive Coli Count	"Raw" Water		Chlorinated Water	
	Routine Samples	Special Samples	Routine Samples	Special Samples
Less than 1 per 100 ml.	77	-	49	8
1 to 2 per 100 ml.	24	2	-	-
3 to 10 per 100 ml.	13	8	-	-
More than 10 per 100 ml. or E coli type 1 present	38	14	-	-
Total:	152	24	49	8

Note:-

The "routine" samples are those taken each Monday throughout the year, a sample being taken from each of the bores from which water is being abstracted at the time of sampling. The "special" samples are the additional ones which were taken daily during the period following the beginning of the pea harvest in order to detect the onset and measure the extent of pollution from pea silage juice. These are shown separately since their inclusion among the "routine" samples would invalidate comparisons with figures for years when the additional samples were not taken. The "special" samples were only taken from one borehole as experience has shown that when serious pollution occurs all four bores are affected.

Chemical Analyses

Barrow Bore	Raw Water	Treated (Softened) Water.
Appearance	Clear	Clear
Colour	Colourless	Colourless
Taste		Normal
Smell	None	None
	Parts per million	
Reaction, pH value	7.4	7.4
Free Carbon Dioxide as CO_2	9.0	6.0
Ammoniacal Nitrogen as N	0.016	0.016
Albuminoid Nitrogen as N	0.024	0.016
Nitrous Nitrogen as N	none	none
Nitric Nitrogen as N	3.73	3.98
Poisonous metals (lead etc.)	none	none
Hardness (Calculated from Mineral Analysis as $CaCO_3$	375.5	99.7
Temporary	202.7	99.7
Permanent	172.8	nil
Permanganate Figure (4 hours at 80°F) as O	0.32	0.36
Alkalinity as $CaCO_3$	202.7	99.7
Mineral Analysis		
Silica as SiO_2	8.0	8.0
Iron as Fe_2O_3	0.03	0.17
Aluminium as Al_2O_3	0.38	0.16
Calcium as Ca	145.44	35.16
Magnesium as Mg	2.98	2.90
Sodium as Na	2.17	129.16
Carbonate as CO_3	121.56	121.56
Chlorides as Cl	41.0	40.00
Nitrates as NO_3	16.51	17.62
Sulphates as SO_4	102.05	103.04
Fluorine as F (by the distillation method)	0.15	0.15
Manganese as Mn	none	none
Probable composition of mineral constituents		
Silica	8.0	8.0
Iron Oxide	0.03	0.17
Aluminium Oxide	0.38	0.16
Calcium Carbonate	202.74	87.81
Calcium Sulphate	144.60	---
Calcium Chloride	60.11	---
Magnesium Chloride	3.48	---
Magnesium Carbonate	---	10.06
Sodium Carbonate	---	109.09
Sodium Chloride	---	65.94
Sodium Sulphate	---	152.38
Sodium Nitrate	8.02	24.16
Magnesium Nitrate	12.75	---
	440.11	457.77

FOOD AND DRUGS ACT - 1955

Samples of Food taken by the County Health Inspector for Chemical Analysis.

Commodity Sampled	No. of samples analysed.
Milk	5
Processed milk, milk products	1
Tinned, bottled, dried products	11
Non-alcholic beverages	1
Sugar, flour, confectionery	2
Meat and fish products	4
Cereal Products	1
Miscellaneous	6
TOTAL	31

Milk Special Designation Regulations

	Nos of Samples.
Pasteurised	19
Sterilised	11

All the above samples satisfied prescribed tests.

ANNUAL REPORT OF THE PUBLIC HEALTH INSPECTOR

HOUSING

Total number of dwelling houses and flats in the district 1502

Total number of houses erected during the year:

By the local authority	Nil
By other local authorities	Nil
By other bodies or persons	18

Housing Repairs and Rents Acts 1954 - 57

No. of certificates of disrepair issued	Nil

Inspection of dwelling houses during the year:

Total number of dwelling houses inspected for housing defects (under Public Health or Housing Acts)	91
Number of inspections made for the purpose	216

Remedy of Defects during the year without service of formal notices:

Number of defective dwelling houses rendered fit in consequence of informal action by the local authority or their officers...	1

Action under Statutory Powers during the year:

Proceedings under Public Health Acts:

Number of dwelling houses in respect of which notices were served requiring defects to be remedied	Nil

Number of dwelling houses in which defects were remedied after service of formal notices:

by owners	1
by local authority in default of owners ...	Nil

Proceedings under the Housing Acts

Number of dwelling houses in respect of which notices were served requiring repairs	nil
Number of dwelling houses which were rendered fit after service of formal notices:	
by owners ...	nil
by local authority in default of owners	nil
Number of certificates of disrepair issued ...	nil

Slum Clearance - Proceedings under the Housing Acts.

Number of dwelling houses in respect of which Demolition Orders were made	3
Number of dwelling houses demolished in pursuance of Demolition Orders	4
Number of dwelling houses, or parts, subject to Closing Orders	nil
Number of dwelling houses, or parts, rendered fit by undertakings	nil
Number of dwelling houses included in confirmed Clearance Orders	nil
Number of dwelling houses demolished in pursuance thereof	nil
Number of dwelling houses on which Demolition Orders are operative and which are still occupied except under the provisions of Sections 34, 35, and 46 of the Housing Act 1957	1
Number of dwelling houses occupied under Section 34, 35, and 46 of the Housing Act, 1957	nil
Houses demolished or closed voluntarily by owners which would otherwise have been the subject of statutory action to secure demolition or closure	1

Estimated number of dwellings remaining to be dealt with under:

The Housing Act 1957 Sections 16 and 18 ...	3
The Housing Act, 1957 Section 42	Nil

Housing Acts - Overcrowding

Number of cases of overcrowding relieved during the year	1
Number of persons concerned in such cases .	12
Number of dwellings overcrowded at the end of the year	6
Number of families dwelling therein ...	6
Number of persons dwelling therein ...	57

Housing Acts, 1949 - 59

Number of dwellings for which applications for grants have been received:

a. Standard Grant ...	6
b. Discretionary Grant	5

Number of dwellings subject to Grant:

a. Standard Grant ...	4
b. Discretionary Grant	nil

Number of houses owned by local authority which have been the subject of grant aid by the Ministry	nil

Moveable Dwellings, Tents, Vans, etc.

Caravan Sites and Control of Development Act, 1960

Number of site licences	1
Number of caravans permitted under such licence	60

Number of inspections during the year:

Sites	51
Caravans	nil

Number of contraventions remedied	nil
Number of sites exempt from licence ...	nil
Number of holiday chalets	nil

FOOD PREMISES

Bakehouses

Number in the district	3
Number of inspections	3
Number of contraventions	1
Number of defects remedied	1

Ice-Cream

Number of manufacturers on register ...	nil
Number of premises licenced for the sale of ice-cream	17
Number of inspections made	26
Number of contraventions found	1
Number of contraventions remedied	1
Number of samples taken	nil

Meat Products

Number of premises registered for manufacture of meat products	8
Number of inspections made	5
Number of contraventions found	nil

Other Food Premises

Number of other food premises (i.e. excluding bakehouses, and premises registered for the manufacture of ice-cream and meat products).	62
Number of inspections	93
Number of contraventions found	16
Number of contraventions remedied	16

Slaughterhouses

Number licensed - Abbattoir type ... ... nil
Private (individual) 1

Number operated by the local authority ... ... nil

UNSOUND FOOD

The following table gives details of meat inspection work carried out during 1966.

	Cattle excluding Cows	Cows	Calves	Sheep & Lambs	Pigs	Horses
Number killed	45	-	-	-	-	-
Number inspected	45	-	-	-	-	-
All diseases except Tuberculosis and Cysticerci - Whole carcases condemned	-	-	-	-	-	-
Carcases of which some part or organ was condemned	2	-	-	-	-	-
Percentage of the number inspected affected with disease other than tuberculosis and cysticerci	4.4	-	-	-	-	-
Tuberculosis only - Whole carcases condemned	-	-	-	-	-	-
Carcases of which some part or organ was condemned	-	-	-	-	-	-
Cysticerosis - Carcases of which some part or organ was condemned	-	-	-	-	-	-
Carcases submitted to treatment by refrigeration	-	-	-	-	-	-
Generalised and totally condemned	-	-	-	-	-	-

Other Foods Condemned

10 tins Corned beef	1 tin Stewed Steak
10 tins ham	8 tins pork luncheon meat
1 tin minced beef	1 tin salmon
2 tins Sardines and pilchards	1 tin tuna
1 tin plums	1 tin oranges
6 tins pineapples	6 tins peaches
2 tins fruit cocktail	5 tins grapefruit
20 tins apricot pulp	107 tins crushed pineapple
55 tins apricots	1 tin baked beans
17 tins peas	10 tins tomatoes
4 tins rice pudding	1 tin condensed milk
8 tins tomato puree	

1930 lbs William pears

Total weight of condemned foods:-

Meat (butchers) - 10 lbs
Other foods 3,699 lbs

Grand Tot. 3,709 lbs

Method of disposal - Meat - Hossell, Grimsby.

Other foods - tipped under supervision

DRAINAGE AND SEWERAGE

Closets

Number of houses with privy vaults in district	Nil
Number of houses with pail closets in district	Nil
Number of houses with water closets in district	1,491
Number of water closets substituted for pail closets and privy vaults	1

Cesspools and Septic Tanks

Number of cesspool and septic tanks emptied, cleansed, etc.	2
Number of cesspools and septic tanks abolished	nil

WATER SUPPLIES

Domestic

Number of houses supplied from public mains	
in house	1,498
outside tap	1
Number of houses supplied from private sources	
in house	3
not in house	nil
Number of houses with unsatisfactory supplies	nil

Swimming Pools

Number in operation	3
Number fitted with continuous mechanical filtration and chlorination	3

GENERAL

Offensive Trades

Number of premises in the district	2
Number of inspections made	7
Number of contraventions remedied	nil

Knackers Yard

Number licenced	nil

Offices, Shops and Railway Premises Act, 1963

Number of premises registered	104
Number of inspections	21
Number of defects	7
Number of defects remedied	5

Disinfection and Disinfestation

Rooms or premises disinfected	nil
Number of premises subject to disinfestation...	nil

Refuse Collection and Disposal

Number of premises from which refuse is collected	1,585
Type of receptacle (i.e. bin or sack)	Bin
Frequency of collection	weekly

Disposal is by partly controlled tipping

Number of tips 1
Number of refuse collection vehicles 1

Details of Nuisance abated

Nuisance	After informal intimation	After Statutory notice
Refuse	8	-
Foul ditches, ponds and stagnant water	3	-
Drainage	15	-
Poultry and Animals	1	-
Dangerous Premises	1	-
Miscellaneous Nuisances	8	-
TOTAL	36	-

Rodent Control

Number of Rodent Operatives employed ... ... 1 part tim

Number of premises treated:
Dwelling houses ... 65
Other premises ... 39

There are no serious reservoirs of rats in the district

The service covers domestic, business and agricultural premises.

Atmospheric Pollution

Number of visits 24
Number of nuisances found 5
Number of nuisances abated 5

FACTORIES ACT, 1961

Part 1 of the Act.

1. Inspection for purposes of provisions as to health.

Premises	Number on Register	Number of		
		Inspections	Written Notices	Occupiers Prosecuted
(i) Factories in which Sections 1,2,3,4 and 6 are to be enforced by local authorities	7	1	-	-
(ii) Factories not included in (i) in which Section 7 is enforced by the local authority	63	25	-	-
(iii) Other premises in which Section 7 is enforced by the local authority (excluding outworkers premises).	17	12	-	-
TOTAL	87	38	-	-

2. Cases in which defects were found

Particulars	Number of cases in which defects were				Number of cases in which prosecutions were instigated
	Found	Remedied	Referred to H.M.I.	by H.M.I.	
Want of cleanliness (S.1)	1	-	-	-	-
Overcrowding (S.2)	-	-	-	-	-
Unreasonable temperature (S.3)	-	-	-	-	-
Inadequate ventilation (S.4)	-	-	-	-	-
Ineffective draining of floors (S.6)	-	-	-	-	-
Sanitary conveniences (S.7)					
Unsuitable or defective	-	-	-	-	-
Insufficient	-	-	-	-	-
Not separate for sexes	-	-	-	-	-
Other offences against the Act (not including offences relating to outwork).	-	-	-	-	-
TOTAL	1	-	-	-	-

Part VIII of the Act

Outwork

No outworkers were reported in the Urban District during the year.